Fig. 1

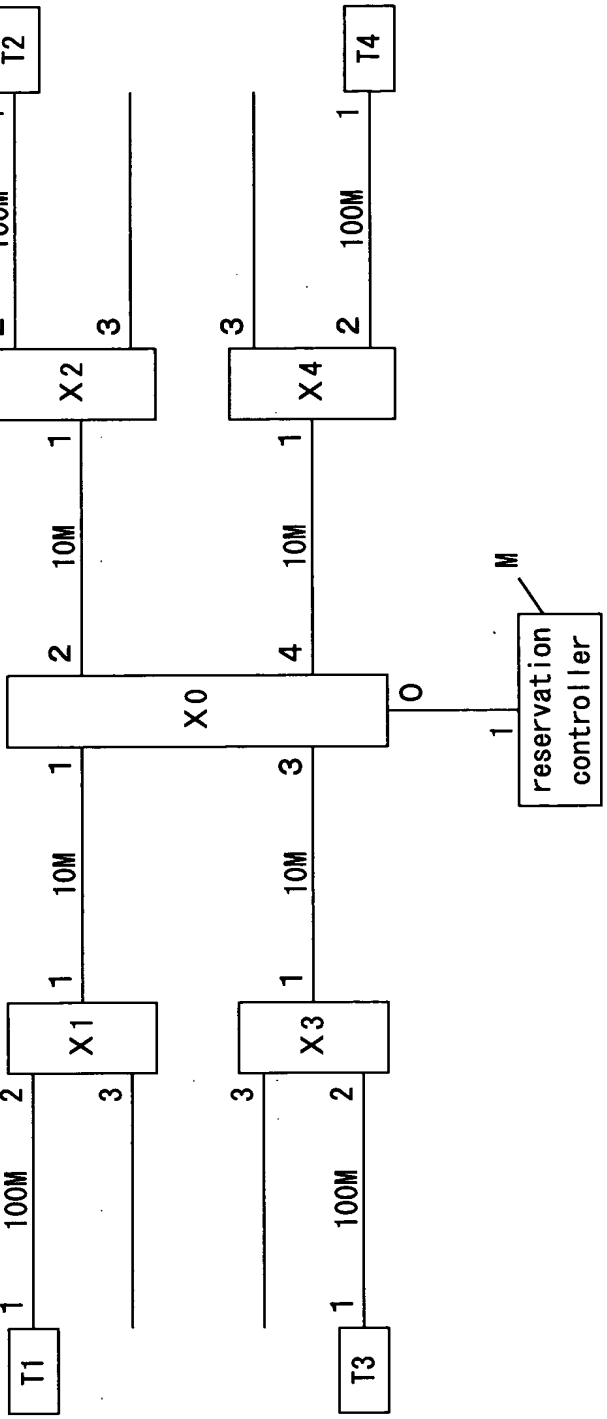


Fig. 2

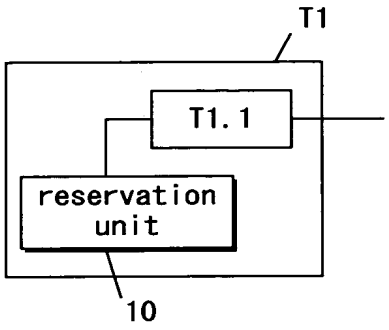

T1
T1.1
reservation unit
10

Fig. 3

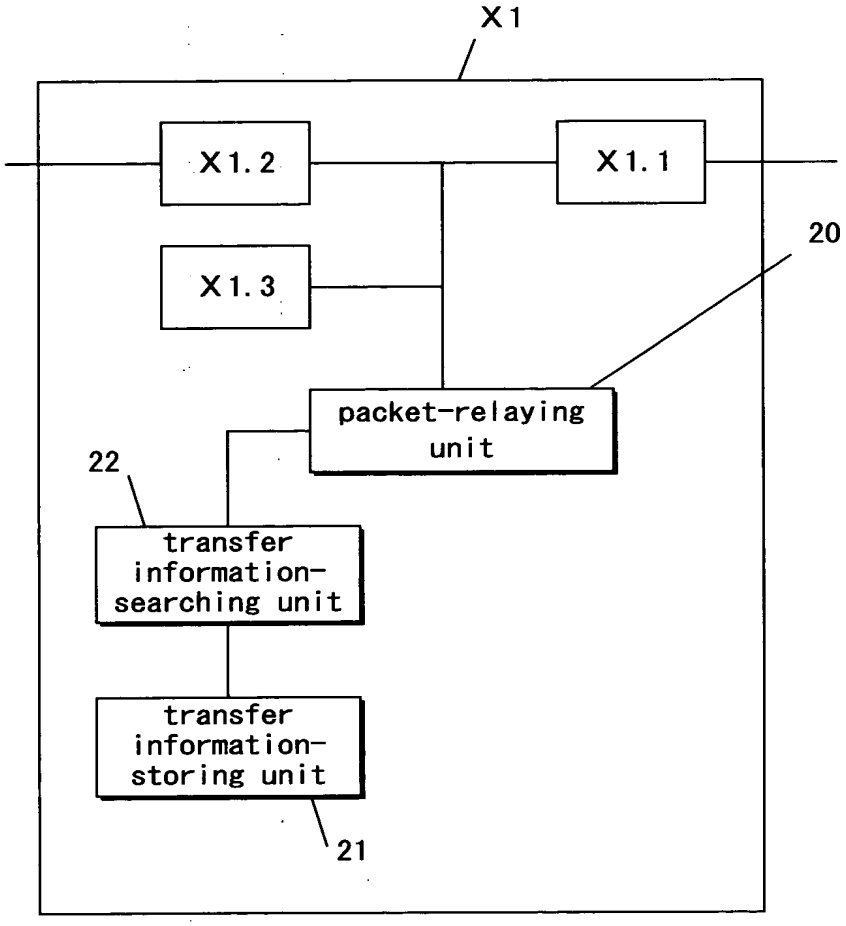

X1
X1.2
X1.1
X1.3
20
packet-relaying unit
22
transfer information-searching unit
transfer information-storing unit
21

Fig. 4

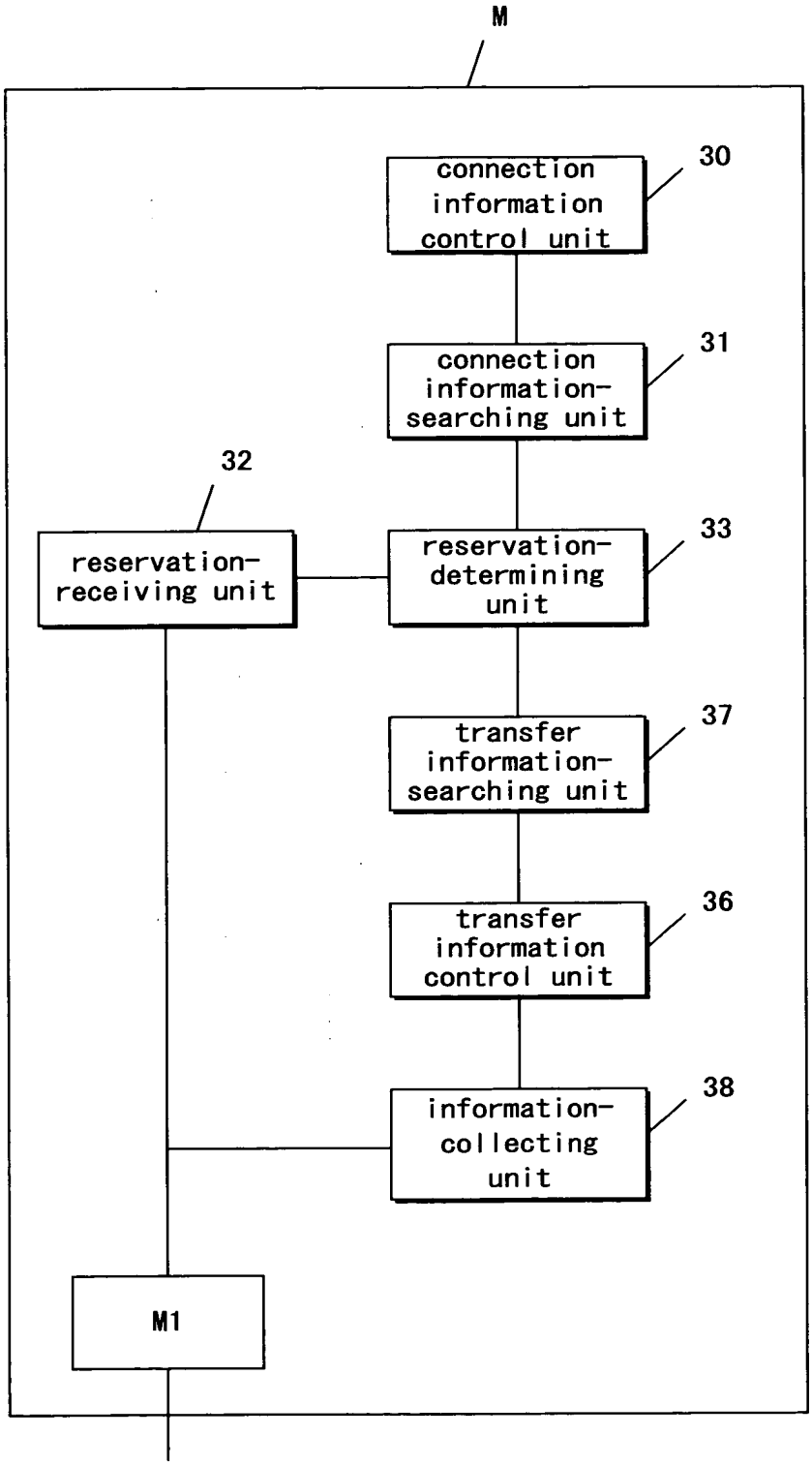

M
connection information control unit
30
connection information-searching unit
31
32
reservation-receiving unit
reservation-determining unit
33
transfer information-searching unit
37
transfer information control unit
36
information-collecting unit
38
M1

Fig. 5(a)

transfer information (X0)

opponent	I/F
M	0
T1	1
T2	2
T3	3
T4	4

Fig. 5(b)

transfer information (X1)

opponent	I/F
T1	2
T2	1
T3	1
T4	1

Fig. 5(c)

transfer information (X2)

opponent	I/F
T1	1
T2	2
T3	1
T4	1

Fig. 5(d)

transfer information (X3)

opponent	I/F
T1	1
T2	1
T3	2
T4	1

Fig. 5(e)

transfer information (X4)

opponent	I/F
T1	1
T2	1
T3	1
T4	2

Fig. 6(a)

via	opponent	resources	reservation
X0.0	M.1	10	0
X0.1	X1.1	10	0
X0.2	X2.1	10	0
X0.3	X3.1	10	0
X0.4	X4.1	10	0
X1.1	X0.1	10	0
X1.2	(T1.1)	100	0
X1.3	—	—	—
X2.1	X0.2	10	0
X2.2	(T2.1)	100	0
X2.3	X0.2	—	—
X3.1	X0.3	10	0
X3.2	(T3.1)	100	0
X3.3	—	—	—
X4.1	X0.4	10	0
X4.2	(T4.1)	100	0
X4.3	—	—	—

Fig. 6(b)

via	opponent	resources	reservation
X0.0			
X0.1			
X0.2	X2.1	4	6
X0.3			
X0.4			
X1.1	X0.1	4	6
X1.2			
X1.3			
X2.1			
X2.2	T2.1	94	6
X2.3			
X3.1			
X3.2			
X3.3			
X4.1			
X4.2			
X4.3			

Fig. 7

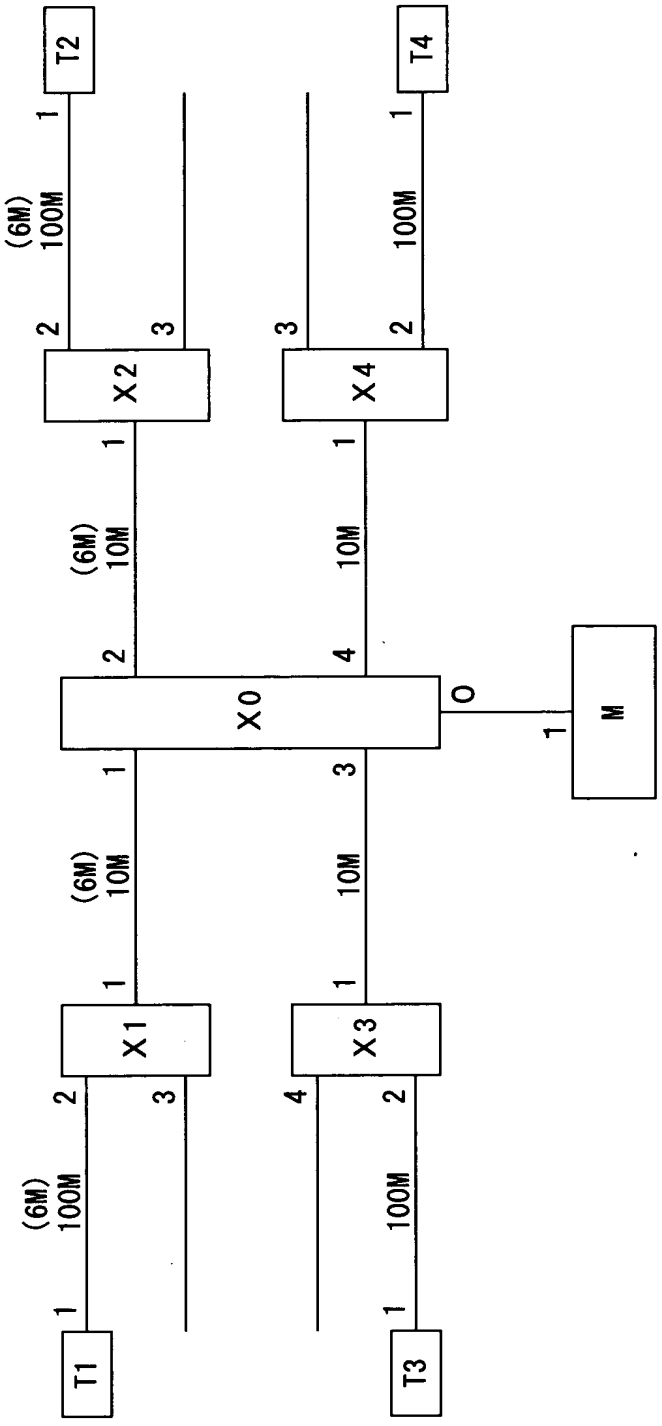


Fig. 8

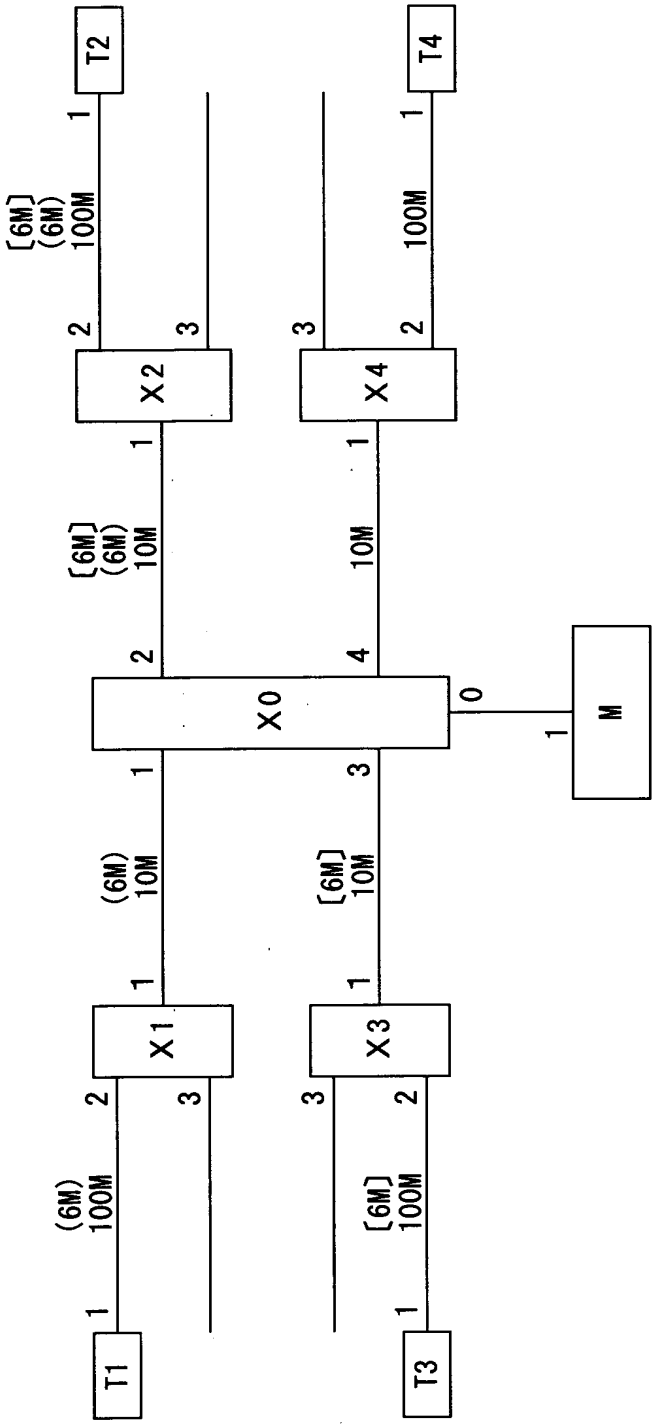

T2
T4
[6M]
(6M)
100M
X2
X4
[6M]
(6M)
10M
X0
M
(6M)
10M
[6M]
10M
X1
X3
(6M)
100M
[6M]
100M
T1
T3

Fig. 9

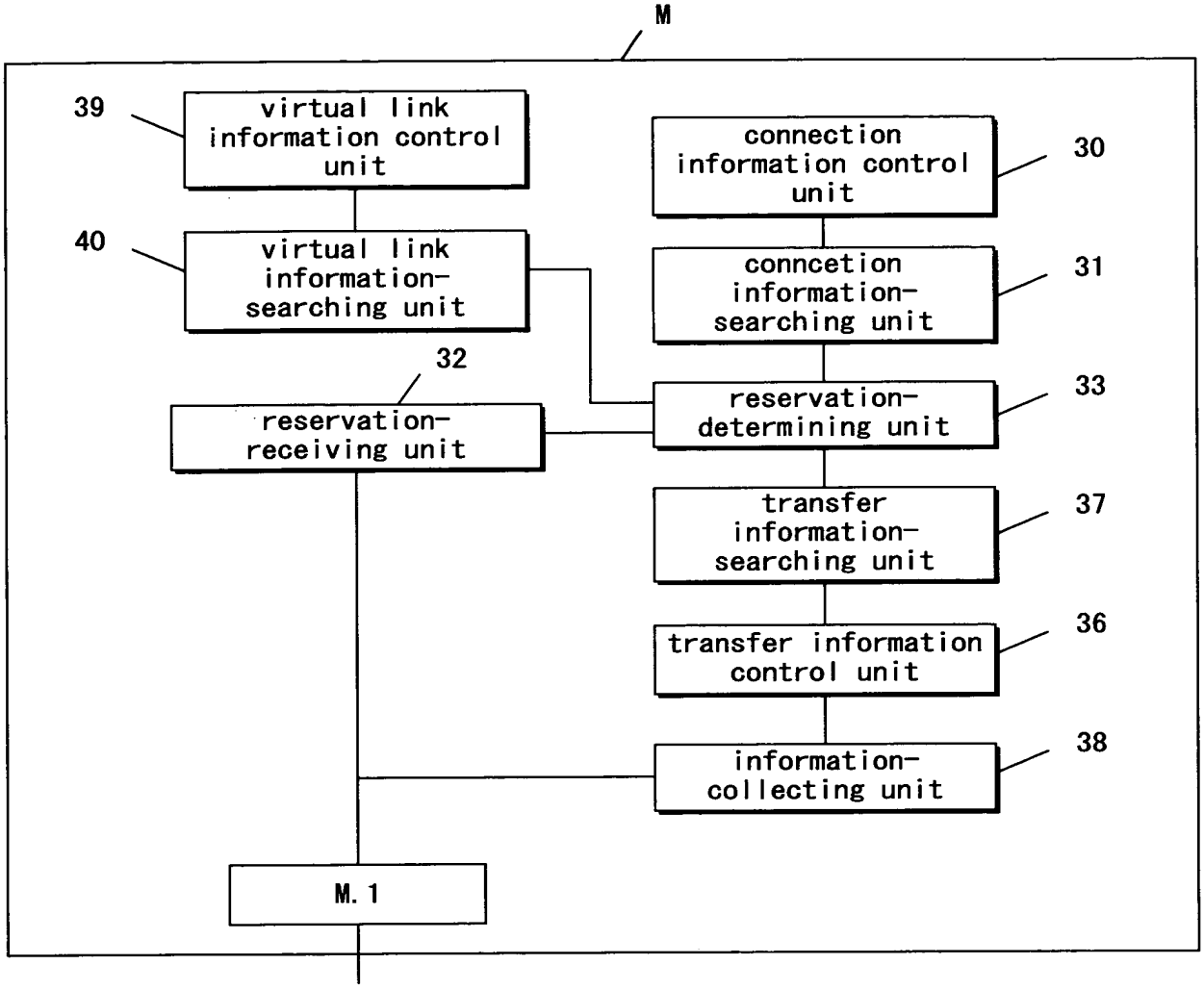


Fig. 10

virtual link information(X3)

opponent	I/F
T1	3

Fig. 11

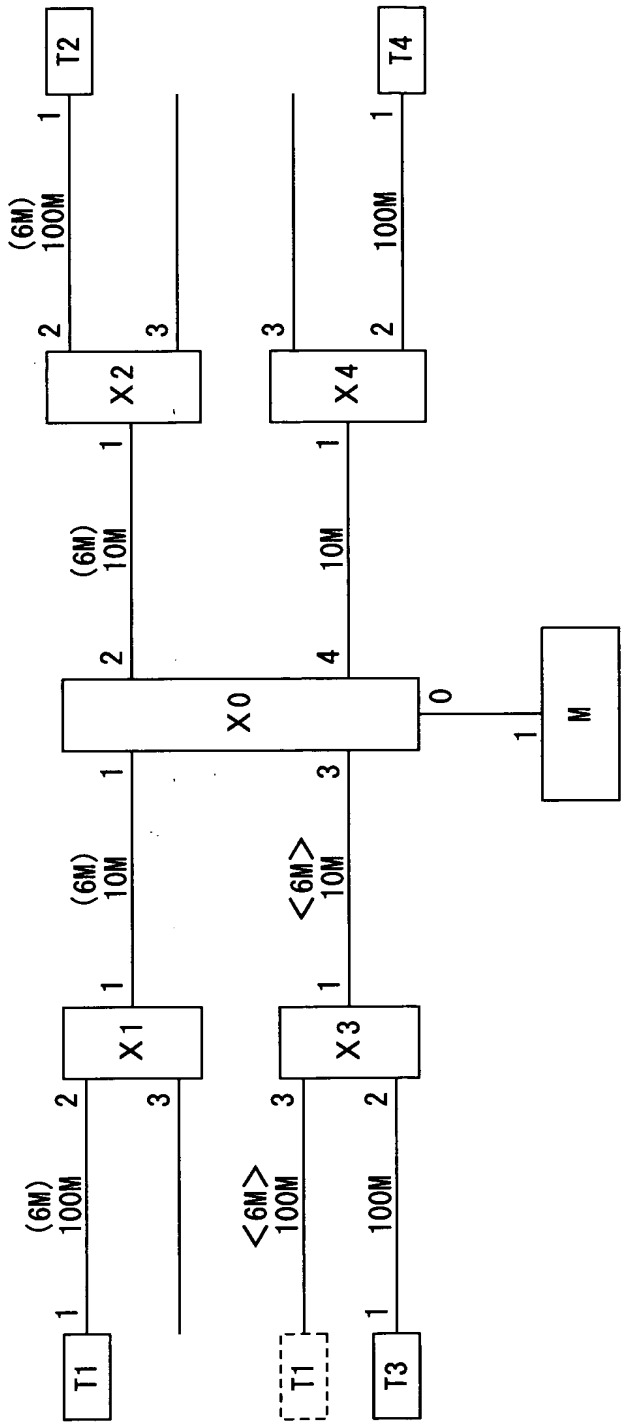

T2
T4
(6M)
100M
1
2
3
X2
X4
(6M)
10M
4
X0
0
M
X1
X3
<6M>
10M
T1
T1
T3
100M
<6M>
100M

Fig. 12

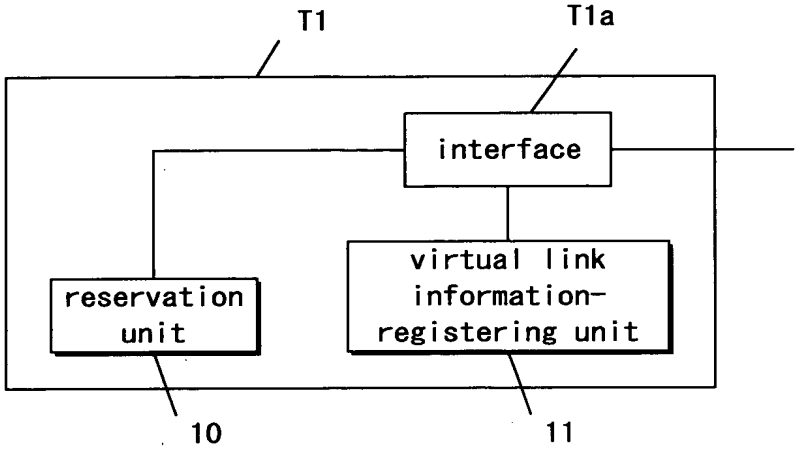

T1
T1a
interface
virtual link information-registering unit
reservation unit
10
11

Fig. 13(a)

destination address	source address	data reservation message other message

Fig. 13(b)

destination address	source address	priority	data resercation message other message

Fig. 13(c)

reservation packet classification	reservation-sending address	reservation-receiving address	reservation resources

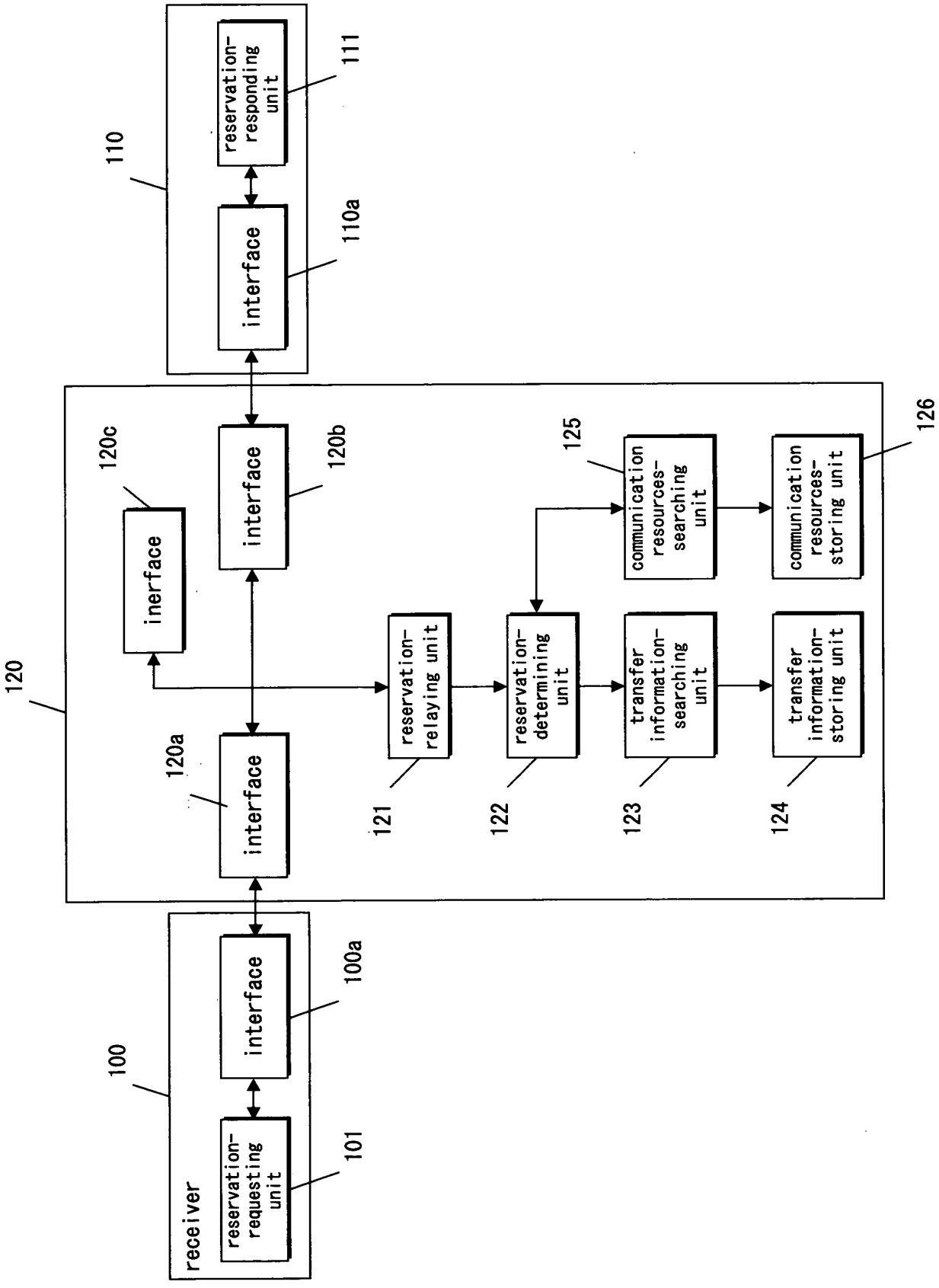
priority	band	...

reservation resources classification	1:priority	value
	2:band	value
	3:maximum delay	value
	4:maximum delay flactuation	value

address	value

reservation packet classification	1:reserving the resources
	2:reserving the resources has failed
	3:reserving the resources has been released
	4:the resources have been secured
	5:securing the resources has failed
	6:securing the resources has been released

Fig. 14


receiver
reservation-requesting unit
interface
reservation-responding unit
interface
inerface
interface
interface
reservation-relaying unit
reservation-determining unit
transfer information-searching unit
transfer information-storing unit
communication resources-searching unit
communication resources-storing unit
100
101
100a
110
111
110a
120
120a
120b
120c
121
122
123
124
125
126